

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

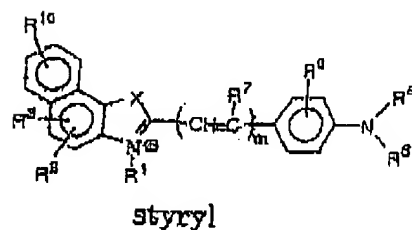
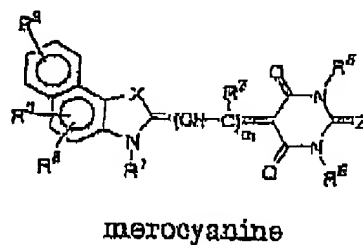
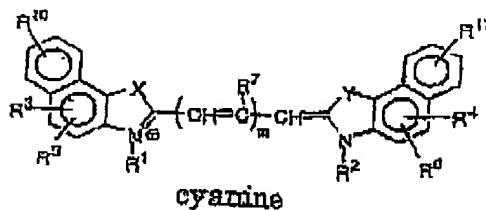
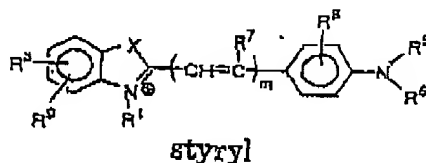
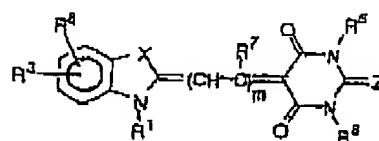
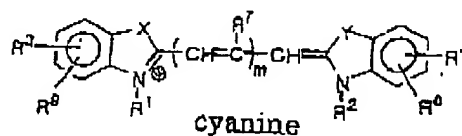
Claim 1 (Currently Amended): A fluorescent nucleotide represented by the formula: A-B-C, wherein A represents a residue of a natural or synthetic nucleotide, oligonucleotide, or polynucleotide, and binds to B at a base moiety in said residue; B represents a divalent linking group or a single bond; and C represents a monovalent group derived from a fluorescent dye having no sulfonic acid group and no phosphoric acid group in a molecule, and having a sulfonamide group ~~or a lower alcohol group~~, in said molecule.

Claim 2 (Cancelled).

Claim 3 (Original): The fluorescent nucleotide according to claim 1, wherein the fluorescent dye is a cyanine, merocyanine, or styryl fluorescent dye.

Claims 4-6 (Cancelled).

Claim 7 (Original): The fluorescent nucleotide according to claim 3, wherein the cyanine, merocyanine, or styryl fluorescent dye is a fluorescent dye having a structure represented by the following formulae,



wherein X and Y are each independently selected from the group consisting of O, S, and $C(CH_3)_2$; Z is selected from the group consisting of O and S; m is an integer selected from the group consisting of 1, 2, 3 and 4; R^1 and R^2 each independently represent a hydrogen atom or an alkyl group that may be substituted with a reactive group capable of covalently binding to B, and an oxygen atom or a sulfur atom may be involved in an alkyl chain of the alkyl group, wherein at least one of R^1 and R^2 represents an alkyl group that may be substituted with a reactive group capable of covalently binding to B; and R^3 to R^{11} each independently represent a hydrogen atom or a monovalent substituent, and two adjacent groups thereof may bind to form a ring.

Claims 8-10 (Cancelled).

Claim 11 (Previously Presented): The fluorescent nucleotide according to claim 7, wherein at least one of R^1 and R^2 is an alkyl group substituted with a carboxyl group.

Claim 12 (Cancelled).

Claim 13 (Previously Presented): The fluorescent nucleotide according to claim 1, wherein A is a residue of a nucleotide.

Claim 14 (Cancelled).

Claim 15 (Previously Presented): The fluorescent nucleotide according to claim 1, wherein A represents a residue of natural or synthetic nucleotide selected from (1) the group consisting of nucleotides consisting of AMP, ADP, ATP, GMP, GDP, GTP, CMP, CDP, CTP, UMP, UDP, UTP, TMP, TDP, TTP, 2-Me-AMP, 2-Me-ADP, 2-Me-ATP, 1-Me-GMP,

1-Me-GDP, 1-Me-GTP, 5-Me-CMP, 5-Me-CDP, 5-Me-CTP, 5-MeO-CMP, 5-MeO-CDP, and 5-MeO-CTP; and (2) the group consisting of deoxynucleotides and dideoxynucleotides corresponding to said nucleotides.

Claim 16 (Cancelled).

Claim 17 (Original): The fluorescent nucleotide according to claim 1, wherein B is a linking group consisting of $-\text{CH}_2-$, $-\text{CH}=\text{CH}-$, $-\text{C}\equiv\text{C}-$, $-\text{CO}-$, $-\text{O}-$, $-\text{S}-$, $-\text{NH}-$, or combinations thereof, wherein a hydrogen atom on the linking group may be further substituted with a substituent.

Claim 18 (Cancelled).

Claim 19 (Original): The fluorescent nucleotide according to claim 17, wherein B is an aminoalkyl group.

Claim 20 (Cancelled).

Claim 21 (Cancelled).

Claim 22 (Cancelled).

Claim 23 (Cancelled).

Claim 24 (Cancelled).

Claim 25 (Cancelled).

Claim 26 (Cancelled).

Claim 27 (Original): A diagnostic agent or a reagent for detecting nucleic acids, which consists of the fluorescent nucleotide according to claim 1.

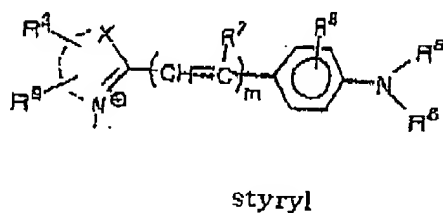
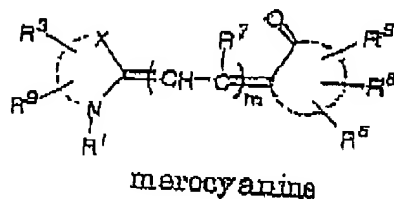
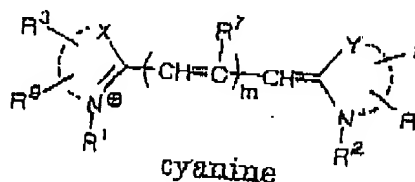
Claim 28 (Canceled).

Claim 29 (Canceled).

Claim 30 (Canceled).

Claim 31 (Canceled).

Claim 32 (Previously presented): The fluorescent nucleotide according to claim 3, wherein the cyanine, merocyanine, or styryl fluorescent dye is a fluorescent dye represented by the following formulae,



wherein X and Y are each independently selected from the group consisting of O, S, and C(CH₃)₂; m is an integer selected from the group consisting of 1, 2, 3 and 4; R¹ and R² each independently represent a hydrogen atom or an alkyl group that may be substituted with a reactive group capable of covalently binding to B, and a oxygen atom or a sulfur atom may be involved in an alkyl chain of the alkyl group, wherein at least one of R¹ and R² represents an alkyl group that may be substituted with a reactive group capable of covalently binding to B; R³ to R⁹ each independently represent a hydrogen atom or a monovalent substituent, and two adjacent groups thereof may bind to form a ring; and the dashed lines represent carbon atoms required to form said cyanine, merocyanine and styryl fluorescent dyes.

Claim 33 (Previously presented): The fluorescent nucleotide according to claim 32, wherein at least one of R¹ and R² is an alkyl group substituted with an active ester group capable of covalently binding to an amino group, a hydroxyl group or a thiol group in the group B.